

SUMMARY (FIGURE 1)

A device for fluorescence correlation spectroscopy, especially for multicolour fluorescence correlation spectroscopy in which light rays are focussed in a transparent medium which is located in a sample vessel (2), comprises a vessel holder (1) in which at least two sample vessels (2) with a focussing reflecting bottom (6) are provided, and a common cover (3) for both sample vessels (2) which is at least partly light-transmitting.

In a suitable method a plunger (4) with a light window facing the bottom (6) is inserted in the sample vessel (2) and the quantity of transparent medium is selected so that the light window of the plunger (4) is wetted by the medium.